

United States Environmental Protection Agency Washington, DC 20460		1. Duty Location Boston, MA		2. Position Number	
Position Description					
3. Classification Action					
a. Reference of Series and Date of Standards Used To Classify This Position					
	b. Title <i>Environmental Engineer</i>	Service c. GS	Series d. 819	Grade e. 13	CLC f.
4. Supervisor's Recommendation					
5. Organizational Title of Position (if any)			6. Name of Employee <i>Mark Sceery</i>		
7. Organization (Give complete organizational breakdown)					
a. U. S. Environmental Protection Agency			e.		
b. Offc. of Ecosystem Protect.			f.		
c. Drinking Water, Tribal & Assist Br			g.		
d. Drinking Water Quality & Prot Sect			h. EPAYS Organization Code QAEA0000		
8. Performance Management and Recognition System (PMRS) Certification for Positions in Grades GS/GM 13-15					
<input type="checkbox"/> S First or second level supervisor of 3 or more employees engaged in substantive professional, technical, or administrative work. Duties include assigning, directing, and reviewing work, evaluating performance, recommending personnel actions, training and developing employees, etc.			<input type="checkbox"/> A An individual (as defined by Title VII of the Civil Service Reform Act) who is authorized to hire, direct, assign, promote, reward, transfer, lay off, suspend, discipline, or remove one or more employees, or effectively recommend such action. The exercise of this responsibility is not routine or clerical in nature but requires the consistent exercise of independent judgment.		
<input type="checkbox"/> M A manager who directs the work of an organization; is accountable for the success of line or staff programs; monitors, evaluates, and adjusts program activities; and performs the full range of management duties outlined in the Supervisory Grade Evaluation Guide. May also include deputies who fully share responsibility for managing the organization or who serve as an alter ego to the manager.			<input type="checkbox"/> B A management official (as defined by Title VII of the Civil Service Reform Act) who formulates, determines, or influences an organization's policies. This means creating, establishing, or prescribing general principles, plans, or courses of action for an organization; deciding on plans or courses of action for the organization; or bringing about a course of action for the organization. Management officials must actively participate in shaping the organization's policies; not just interpret laws and regulations, give resource information or recommendations, or serve as experts or highly trained professionals who implement or interpret the organization's policies and plans.		
<input checked="" type="checkbox"/> N None of the above applies to this position. Exempt from PMRS.			SEE SPECIAL NOTE BELOW.		
9. I certify that this is an accurate statement of the major duties and responsibilities of this position and its organizational relationships, and that the position is necessary to carry out Governmental functions for which I am responsible. The certification is made with the knowledge that this information is to be used for statutory purposes relating to appointment and payment of public funds, and that false or misleading statements may constitute violations of such statutes or their implementing regulations.					
a. Typed Name and Title of Immediate Supervisor Jane Downing Manager, MA State Program			d. Typed Name and Title of Second-Level Supervisor David Fierro Office Director		
b. Signature		c. Date		e. Signature <i>David Fierro</i>	
				f. Date 9/21/95	
10. Official Classification Certification					
a. <input checked="" type="checkbox"/> This position has no known promotion potential <input type="checkbox"/> If position develops as planned and employee progresses satisfactorily, this position has known promotion potential to grade --					
b. Fair Labor Standards Act <input type="checkbox"/> Nonexempt <input checked="" type="checkbox"/> Exempt			c. Signature of Classification Official <i>Irma Field</i>		d. Date 9/25/95
11. Remarks (Continue on additional sheet(s) if necessary)					
Effective 10/31/93, PMRS ended. As of 11/1/93 employees are considered "GS" for classification and pay administration purposes. See P.L. 103-89, PMRS Termination Act of 1993 for specific guidance. BUS Code: 1050 F.C: 94 L.R					
12. Duties and Responsibilities Type on plain bond paper and attach to this form. Use format shown on reverse.					

POSITION DESCRIPTION AMENDMENT

EMPLOYEE'S NAME

ORGANIZATION LOCATION OF POSITION

OFC. OF ECOSYSTEM PROTECTION

POSITION TITLE

SERIES

GRADE

POSITION NUMBER

AMENDMENT.

Effective 9/29/95 this position reports to:

OFFICE OF ECOSYSTEM PROTECTION
MASSACHUSETTS STATE PROGRAM

The duties and responsibilities of this position remain
substantially unchanged.

CLASSIFIER'S SIGNATURE

DATE

SUPERVISOR'S SIGNATURE

DATE

**ENVIRONMENTAL ENGINEER
GS-13**

I. INTRODUCTION

This position is located in the Water Supply Section, Water Supply Branch, Water Management Division of EPA New England Region. The function of this position is to provide assistance, guidance, and direction to State Drinking Water Agencies in the review of regulations and compliance with those regulations related to the Safe Drinking Water Act (SDWA). The Water Supply Section also manages State Public Water System Supervision grants and provides technical assistance to the Water Management Division in the Safe Drinking Water Act (SDWA) enforcement area. The principal activities and areas of responsibilities of this position include:

- Regional expert on chemical contaminants:
 - Regional inorganic and organic chemical contaminants regulations expert.
 - Treatment of drinking water contaminated with inorganic and organic chemicals.
 - Coordinator for innovative treatment technologies for chemical contaminant removal.
 - Coordinator of chemical contaminant waiver program.
 - Regional expert on all national workgroups pertaining to chemical contaminants and their regulations.
- Source water protection and vulnerability assessments.
- Indian Direct Implementation Program Coordinator.

II. MAJOR DUTIES

- 1a. The incumbent shall act as contact and expert for all questions and issues related to inorganic and organic chemical contaminants that may be in drinking water. Knowledge of the chemical regulations for drinking water, including monitoring requirements, Maximum Contaminant Levels (MCL), laboratory methods, and treatment requirements, is essential. Must be able to make interpretations of the regulations for complex situations presented by state and tribal agencies. Must be familiar with the intent of the regulations as presented in the preambles of the Federal Register notices. Individual is an expert in the chemical field and as such provides information and education to various state,

tribal and water industry groups on the regulations through seminars, lectures, and meetings. For example, the New England Water Works Association or any of the local Rural Water Association chapters.

- 1b. The 1986 statutory provisions of the SDWA amendments have brought a large number of previously unregulated or minimally regulated water systems under significant regulatory control. Most of these water systems are small and do not have the financial resources and expertise to address water treatment concerns in order to comply with the SDWA. The incumbent is an expert in both established and emerging technologies needed to comply with these new regulations, many of which involve organic and inorganic drinking water contaminants. The incumbent is familiar with treatment technologies for organics removal which include: granular activated carbon, packed tower aeration, powdered activated carbon, oxidation including ozone, membrane filtration, etc. Treatment technologies for inorganics removal include reverse osmosis, ion exchange, activated alumina, aeration, and powdered activated carbon.

Responsible for the regional technical review of drinking water treatment projects to ensure conformance with EPA's Phase II and V Rules and is the regional authority with regards to treatment of water contaminated with inorganic and organic chemicals. Advises the states and tribes on the use of particular treatments as necessary. Works with the states on developing protocols for the use of various treatment technologies for removing chemical contaminants. Ensures that treatment is operated, maintained and managed correctly so as to be protective of human health.

- 1c. Independently develops and maintains, through monitoring current technical conferences, workshops, seminars, monthly and annual water works meetings, contacts with national experts in the field, ³⁴overviews of planned and completed drinking water projects in and out of the United States, an up-to-date and extensive working knowledge of state-of-the-art and new advancements in water treatment technology. Also, individual is considered the Regional authority on water treatment technology and is thoroughly familiar with the SDWA, and its amendments, pertinent regulations, and EPA policies relating to the SDWA. On the basis of the above, the incumbent reviews drinking water treatment plants, those already in operation and those to be built, to determine if the treatment scheme of those facilities is adequate to meet the present and near-term MCLs to be promulgated.

As the Regional authority on advanced drinking water treatment technology, provides information, guidance and advice to regulatory agencies and the public. This is done by conducting and/or participating in meetings, workshops, seminars and/or conferences in various locations for state, tribal and local regulatory agencies. Provides an overview of state activities through meetings with state officials and reviews state decisions to ensure they are consistent with the SDWA and the treatment technology available to meet the MCL standards.

Serves as the Regional contact for the dissemination of Technology Transfer related to Advanced Water Treatment. Individual represents EPA as a technical expert on water utility organization committees/workgroups related to water treatment and technologies for chemical removal.

- 1d. Responsible for review of all state and tribal monitoring waiver plans under the Phase II and V rules. Reviews proposals for technical soundness, state resource requirements, and accountability. Provides technical assistance to the states in developing the waiver plans, including rule interpretations and information on specific chemical contaminants. Coordinates review of plans with interested EPA sections such as Pesticides or Groundwater.

Recommends approval or denial of the plans and develops a minimally acceptable program for the Region's states in order to ensure the protection of public health. Negotiates with Headquarters on the acceptability of waiver plans. Develops audit techniques for the Region to use in evaluating the state's waiver program and ensuring what is being implemented by the state is what was agreed to in their approved plan.

Is the Regional contact for all studies and reports on flexibility within the SDWA. Prepares estimates of cost savings from the states' waiver programs.

- 1e. Serves on all regional and national workgroups concerning the Phase II and V rules, other present and future chemical contaminants, treatment techniques for water contaminated with chemicals, and source protection from chemical contamination. These groups include both EPA and industry workgroups.

Represents the Region and states on rule-making workgroups for developing new rules for monitoring, treatment and maximum contaminant levels for additional chemical contaminants. Also works on the monitoring trigger/lab certification workgroup developing new monitoring trigger levels and laboratory certification requirements for chemical contaminants. Participates in workgroups which evaluate the implementation of these regulations and makes recommendations on how to improve them. Requires that the incumbent keep in touch with state counterparts to continually inform them of progress and maintain their point of view.

Also participates in the Phase II/V Regional workgroup consisting of the Phase II/V coordinators from all of the Regions. This group shares rule interpretations and implementation problems and solutions.

2. Serves as the Water Supply Section's source-water-protection coordinator for chemical contaminants. Advises states and tribes on source-water-protection procedures and vulnerability assessments, especially as they relate to granting waivers from monitoring. Interacts with various sections within EPA, such as groundwater, pesticides, and NPDES, to determine what types of threats to

water systems exist within the region, and what types of authorities exist to protect water supplies from contamination. Participates with the states as needed in performing source-water-protection inspections. Is knowledgeable in wellhead delineations, contaminant source inventories, best management practices, and land-use controls.

Is the Water Supply contact for the Rhode Island Integration project, which is assisting all water systems in the state to develop source-water-protection plans. This includes creating an inventory of potential contamination sites and developing management plans for protecting their water sources from those contaminants.

3. Runs the Regional direct implementation programs for those Indian Tribes under the jurisdiction of EPA - New England. Performs all tasks associated with this program including: setting monitoring requirements, reviewing compliance data, performing sanitary surveys, making initial compliance determinations, carrying out informal enforcement actions, and referring violations to the enforcement section for formal enforcement. Other duties include distributing educational information to the Tribes including technical information on the treatment of water and regulatory information, assisting the Tribes in obtaining Treatment as a State and Primacy for the Public Water Supply Supervision program, and representing the Region on the National Indian Direct Implementation Workgroup. Obtains national contract money from EPA HQ to hold training sessions for the Region I Tribes.
4. Performs other related duties as assigned.

III. SUPERVISION RECEIVED

Incumbent's immediate supervisor is the Chief of the Water Supply Section. Assignments are provided in general terms which outline the overall objectives to be achieved. The incumbent, as the technical authority, is required to develop approaches for gaining and maintaining expertise. All project reviews and subsequent recommendations and training are completed independently with considerable latitude for exercising judgement in resolving difficult, complex, sensitive, and/or controversial issues, some of which may have implications in directing national policy in the regulation of specific drinking water contaminants.

Assignments involving rule compliance, direct implementation activities, and management activities will be made by the supervisor on the basis of geographic area. Treatment recommendations and source water protection inspections and recommendations are performed independently with considerable latitude. Decisions and recommendations are accepted as technically accurate. Completed work and reports are reviewed in terms of broad objectives and compliance with Agency policies and regulations.

IV. KNOWLEDGE REQUIRED BY THE POSITION

Mastery of advanced concepts, principles and practices of environmental engineering to serve as the technical authority on all aspects of the protection from and treatment of inorganic and organic contaminants in drinking water. Most facilities reviewed by incumbent are unique in nature with some element of risk provided in advanced or innovative treatment. Expertise should be demonstrated through registration as a Professional Engineer (P.E.) or equivalent.

Knowledge and skill to independently analyze design, operation, maintenance and management problems encountered in drinking water treatment systems and the ability to provide technical assistance necessary to implement remedial actions to bring systems up to performance criteria.

Knowledge of the chemistry of inorganic and organic chemicals in water, soils, and sediments, their environmental pathways, and their persistence and fate.

Knowledge and skill to evaluate state monitoring waiver plans for adequate public health protection and the ability to implement the plan with their given resources.

Knowledge of SDWA, as amended, and EPA program policies and regulations to conduct and effective overview of activities performed by the States and Tribes, to train and advise EPA, State, and Tribal personnel in areas of responsibility, and to review highly controversial and sensitive projects.

Knowledge and skill to conduct technical training and the ability to perform oral and written presentations.

V. Guidelines

Guidelines consist of engineering manuals and publications; textbooks; the Congressional Act; local, State, and federal regulations and statutes; Agency policies and program directives; and publications of professional societies. The engineer independently selects, interprets and applies the guides, modifying, adapting, and making compromises as required by the nature of the specific project being overviewed. Judgment and originality are required to relate theoretical environmental principles and scientific considerations with actual experience, to evolve compromises, to recommend corrective actions for deficiencies noted during overview of State programs. The incumbent is expected to deviate from traditional methods and practices, as required, particularly during the review of innovative treatment technologies and pilot plant data, performing technology evaluations on the basis of feasibility, reliability and cost effectiveness.

VI. Complexity

Assignments involve the performance of highly technical evaluations of the design,

operation, maintenance, and management of complex and high-cost drinking water systems and drinking water treatment plants, as well as recommending and implementing solutions to the problems encountered and the provision of training and guidance in these areas when requested. Complex assignments include evaluating water supply source/water protection areas to ensure that the water supply is sufficiently protected from a multitude of contamination sources. Assignments also involve evaluating and making decisions on high-risk, complex, innovative and/or advanced treatment facilities. These assignments involve coordination with the States, municipal officials, engineering consultants and other operating units of EPA. This requires flexibility, and innovative judgments and state-of-the-art knowledge necessary to resolve various issues involving technical, environmental, social and economic tradeoffs. Technical considerations of plant designs, construction, operation, maintenance, and management require the application of sophisticated judgments and periodically require consultation with other operating units of EPA and experts in the private sector. Value judgements are necessary to assess the cost/benefit of a proposed action, as well as the overall impact of the proposal on the public health, to include political ramifications.

VII. Scope and Effect

The purpose of the work is to ensure that the objectives of the Phase II and V rules, source water protection, and the Indian Direct Implementation program are met while maintaining program integrity. In addition, the goal of the work is to ensure that treatments and instrumentation which are installed, are operated, maintained, and managed in a manner such that the public health is protected. The objectives of these sections are to provide high-quality drinking water, hence public health benefits, through effective drinking water treatments and comprehensive source water protection plans.

VIII. Personal Contacts

Personal contacts are with state, local, and other federal officials, administrators, engineers, scientists, operators, elected representatives, representatives of state and local planning agencies and environmental groups, consultants, manufacturers' representatives, attorneys representing Federal, State, and local governments, congressional staff, and the public. Contacts with Headquarters on a personal basis as well as on National Committees dealing with assigned responsibilities also occur.